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EXAMINER
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BOUTAH, ALINA A

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**Technology Center 2100**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/811,906  
Filing Date: March 19, 2001  
Appellant(s): VASQUEZ ET AL.

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Harold C. Moore  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed February 21, 2007 appealing from the Office action mailed July 13, 2005.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

1. Applicant's Admitted Prior Art – specification, pages 1-4.
2. USPN 5,560,038 issued to Haddock.
3. Examiner's Official Notice.

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (hereinafter referred to as AAPA) in view USPN 5,560,038 issued to Haddock, in further view of Examiner's Official Notice.

Regarding claim 1, AAPA teaches a method for communicating information between a plurality of local area network sections having different transmission speeds, the plurality of local area network sections employing a physical layer protocol in which an unsuccessful transmission is communicated to a transmission source prior to completion of the transmission, the method comprising the steps of:

- a) receiving, a packet that is transmitted from a source terminal in a source network section having a source transmission speed to a destination terminal in a destination network

section having a destination transmission speed (specification page 1, 3<sup>rd</sup> paragraph, lines 1-7 and page 2, second paragraph, lines 1-6).

However, AAPA fails to teach 1) the destination transmission speed differing from the source transmission speed, 2) determining the transmission speed for the destination terminal; and 3) re-transmitting, within the physical layer protocol, the received packet to the destination network section at the destination transmission speed.

Haddock teaches: 1) the destination transmission speed differing from the source transmission speed (col. 3, lines 13-29; col. 3, line 65 to col. 4, line 12; col. 4, lines 43-67; col. 6, lines 14-19; col. 6, line 63 to col. 7, line 12), 2) determining the transmission speed for the destination terminal (col. 5, lines 22-43) and 3) re-transmitting the received packet to the destination network section at the destination transmission speed (col. 7, lines 3-12; col. 7, lines 31-44). At the time the invention was made, one of ordinary skill in the art would have been motivated to determine the transmission speed for the destination terminal and re-transmit, within the physical layer protocol, the received packet to the destination network section at the destination transmission speed in order to interconnect heterogeneous networks that operate at different transmission speeds, therefore maximizing the throughput of the data transmission.

Although neither AAPA nor Haddock explicitly teach receiving and retransmitting data packet within the physical layer, Examiner takes Official Notice (see MPEP § 2144.03) that in a computer networking environment, this feature is well known in the art at the time the invention was made. The Applicant is entitled to traverse any/all official notice taken in this action according to MPEP § 2144.03, namely, "if applicant traverses such an assertion, the examiner

should cite a reference in support of his or her position". However, MPEP § 2144.03 further states "See also *In re Boon*, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice)." Specifically, *In re Boon*, 169 USPQ 231,234 states "as we held in *Ahlert*, an applicant must be given the opportunity to challenge either the correctness of the fact asserted or the notoriety or repute of the reference cited in support of the assertion. We did not mean to imply by this statement that a bald challenge, with nothing more, would be all that was needed". Further note that 37 CFR § 1.671 (c)(3) states "Judicial notice means official notice". Thus, a traversal by the Applicant that is merely "a bald challenge, with nothing more" will be given very little weight.

Regarding claim 2, AAPA teaches the method of claim 1, further comprising, prior to step c, determining whether the destination network section is busy prior to the re-transmitting step (Specification, page 2, 1<sup>st</sup> paragraph, lines 1-2; page 3, 1<sup>st</sup> paragraph, lines 3-6).

Regarding claim 3, AAPA teaches the method of claim 2, further comprising, after step b, determining whether the destination network section is busy prior to the re-transmitting step (Specification, page 2, 1<sup>st</sup> paragraph, lines 1-2; page 3, 1<sup>st</sup> paragraph, lines 3-6).

Regarding claim 4, AAPA teaches the method of claim 1, wherein the step c further comprises commencing re-transmission of the received packet before the source terminal completes its transmission of the packet (specification, page 3, 1<sup>st</sup> paragraph, line 3 to 2<sup>nd</sup> paragraph line 5).

Regarding claim 5, AAPA teaches the method of claim 4, further comprising delaying the re-transmission of the received packet (specification, page 3, 2<sup>nd</sup> paragraph, lines 3-5).

Regarding claim 6, AAPA fails to teach the method of claim 5, further comprising: commencing re-transmission of the received packet at a higher speed after receiving only a portion of the received packet; re-transmitting the received packet continuously at the higher speed; and completing re-transmission of the received packet after completely receiving the received packet.

Haddock teaches commencing re-transmission of the received packet at a higher speed after receiving only a portion of the received packet; re-transmitting the received packet continuously at the higher speed; and completing re-transmission of the received packet after completely receiving the received packet (col. 2, lines 9-32; col. 6, line 65 to col. 7, line 2).

At the time the invention was made, one of ordinary skill in the art would have been motivated to combine the teaching of Haddock with AAPA in order to to interconnect

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heterogeneous networks that operate at different transmission speeds, therefore maximizing the throughput of the data transmission.

Regarding claim 7, AAPA fails to teach the method of claim 1, further comprising: controlling a cross point to connect the source network section to the destination network section. Haddock teaches controlling a cross point to connect the source network section to the destination network section (col. 5, lines 1-21). At the time the invention was made, one of ordinary skill in the art would have been motivated to employ a cross point to connect the source network section to the destination network section in order to interconnect heterogeneous networks that operate at different transmission speeds, therefore maximizing the throughput of the data transmission.

Regarding claim 8, the AAPA-Haddock combination teaches the method of claim 2, further comprising: controlling a first cross point to unilaterally connect the destination network section to an interface circuit; and employing the interface circuit to determine whether the destination network section is busy (AAPR, specification, page 3, 1<sup>st</sup> and 2<sup>nd</sup> paragraph; Haddock, col. 5, lines 1-21).

Regarding claim 9, the AAPA-Haddock combination the method of claim 8, further comprising: controlling a second cross point to unilaterally connect the source network section to



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the destination network section if the interface circuit determines that the destination network section is not busy (AAPR, specification, page 3, 1<sup>st</sup> and 2<sup>nd</sup> paragraph; Haddock, col. 5, lines 1-21).

Regarding claim 10, AAPA teaches the method of claim 8, further comprising: signaling a collision to the source network section if the interface circuit determines that the destination network section is busy (specification, page 3, lines 6-8).

Regarding claim 11, AAPA teaches a method for communicating information between a plurality of local area network sections having different transmission speeds, the method comprising the steps of:

a) receiving a packet that is transmitted from a source terminal in a source network section having a source transmission speed to a destination terminal in a destination network section having a destination transmission speed (specification page 1, 3<sup>rd</sup> paragraph, lines 1-7 and page 2, second paragraph, lines 1-6);

c) determining whether the destination network section is not busy prior to receiving all of the packet (specification page 3, 2<sup>nd</sup> paragraph, lines 1-5); and

d) re-transmitting the received packet to the destination network section at the destination transmission speed if the destination network section is determined to be not busy (specification page 3, 2<sup>nd</sup> paragraph, lines 1-5).

However, APPA fails to teach the destination the transmission speed differing from the source transmission speed and determining the transmission speed for the destination terminal.

Haddock teaches: 1) the destination transmission speed differing from the source transmission speed (col. 3, lines 13-29; col. 3, line 65 to col. 4, line 12; col. 4, lines 43-67; col. 6, lines 14-19; col. 6, line 63 to col. 7, line 12), 2) determining the transmission speed for the destination terminal (col. 5, lines 22-43) and 3) re-transmitting the received packet to the destination network section at the destination transmission speed (col. 7, lines 3-12; col. 7, lines 31-44). At the time the invention was made, one of ordinary skill in the art would have been motivated to determine the transmission speed for the destination terminal and re-transmit, within the physical layer protocol, the received packet to the destination network section at the destination transmission speed in order to interconnect heterogeneous networks that operate at different transmission speeds, therefore maximizing the throughput of the data transmission.

Although neither AAPA nor Haddock explicitly teach receiving and retransmitting data packet within the physical layer, Examiner takes Official Notice (see MPEP § 2144.03) that in a computer networking environment, this feature is well known in the art at the time the invention was made. The Applicant is entitled to traverse any/all official notice taken in this action according to MPEP § 2144.03, namely, "if applicant traverses such an assertion, the examiner should cite a reference in support of his or her position". However, MPEP § 2144.03 further states "See also *In re Boon*, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice)." Specifically, *In re Boon*, 169 USPQ 231,234 states "as we held in *Ahlert*, an applicant must be given the

opportunity to challenge either the correctness of the fact asserted or the notoriety or repute of the reference cited in support of the assertion. We did not mean to imply by this statement that a bald challenge, with nothing more, would be all that was needed". Further note that 37 CFR § 1.671 (c)(3) states "Judicial notice means official notice". Thus, a traversal by the Applicant that is merely "a bald challenge, with nothing more" will be given very little weight.

Claim 12 is similar to claim 4, therefore is rejected under the same rationale.

Claims 13-18 are similar to claims 5-10, respectively, therefore are rejected under the same rationale.

#### **(10) Response to Argument**

Appellant admits that the admitted art describes interface unit that allows multiple LANs to be connected at the physical layer. The switch interface unit obtains a destination address for a received packet, determines if there is activity on the LAN of the destination address, and sends a collision to the source of the packet if the destination is busy, all before the source finishes transmitting the packet (Appeal: page 7).

Appellant also admits that Haddock teaches a translation engine for translating frames of data from one frame format to another frame format. The translation engine has a variable length data pipeline capable of maintaining a constant synchronous data stream comprising frames of data from the input to the output of the data pipeline. Haddock employs the technology in a packet layer switch (Appeal: page 7-8).

Appellant does not dispute that receiving and transmitting a data packet within the physical layer is known in a computer-networking environment as alleged by the Examiner's Official Notice (Appeal: page 8).

Appellant's arguments have been fully considered but they are not persuasive.

In response to Appellant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the admitted art teaches receiving and transmitting data packets within physical layers, while Haddock teaches re-transmitting the data within packet layers. One of ordinary skill in the art would have been motivated to modify Haddock's teaching to re-transmit at a physical layer in order to connect networks at different speeds. One of ordinary skill in the art would transmit data in physical layers because it allows for faster communication (AAPA: specification, page 2, lines 12-17).

In response to Appellant's argument that AAPA, Haddock and Examiner's Official Notice fail to arrive at the invention of claims 4 and 12, the PTO respectfully disagrees and submits that this is taught by AAPA at the area cited above. Specification, page 3, lines 11-13 of AAPA discloses a first-in-first-out (FIFO) buffer that stores an in-coming packet before it is transmitted to its destination. In order to send the next packet, the stored packet must already be sent.

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Claim 11 differs from claim 1 in that it recites, "determining whether the destination network section is not busy prior to receiving all of the packet." This limitation is taught by AAPA in the specification page 3, 2<sup>nd</sup> paragraph, lines 1-5.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

ANB

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